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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,037	04/30/2001	Brian T. Murren	GE1-003US	5208
21718	7590	11/03/2004	EXAMINER SON, LINH L D	
LEE & HAYES PLLC SUITE 500 421 W RIVERSIDE SPOKANE, WA 99201			ART UNIT 2135	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/847,037

Applicant(s)

MURREN ET AL.

Examiner

Linh Son

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 2
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 1-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-7 consist solely of computer program, which is nonstatutory functional descriptive material.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5, 8-14, 16, 19-23, 26-29, 31-32, and 34-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Gong, US Patent 6047377, hereinafter '377.

3. As per claim 1, "A system comprising: a pluggable security policy enforcement module configured to be replaceable in the system and to provide different granularities of control for a business logic in the system, wherein the business logic processes

requests submitted to the system” is taught in ‘377 (Col 2 lines 23-43 and Col 1 lines 53-65).

4. As per claims 2 and 16, “A system as recited in claims 1 and 8, wherein the different granularities of control comprise a plurality of sets of rules that can be replaced with each other without altering the business logic” is taught in ‘377 (Col 6 lines 12-54).

5. As per claims 3, “A system as recited in claim 1, wherein the pluggable security policy enforcement module is further configured to determine, for a particular granularity of control, whether to permit an operation, requested by a user based, based at least in part on a permission assigned to the user” is taught in ‘377 (Col 6 lines 12-19, and Col 12 line 65 to Col 13 line 34).

6. As per claims 4, 20 and 27, “A system as recited in claims 1, 19, and 26, wherein the pluggable security policy enforcement module includes a control module configured to determine whether to permit an operation based at least in part on accessing the business logic to identify one or more additional tests to perform, and further configured to perform the one or more additional tests” is taught in ‘377 (Fig 4 #480, and Col 13 lines 59-65, and Col 18 lines 30-45).

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7. As per claims 5, 21, 29, and 34, "A system as recited in claims 4, 20, 27, and 33, wherein the control module is further configured to return a result of the determining to the business logic" is taught in '377 (Col 19 lines 19-35).

8. As per claims 8, "One or more computer-readable media comprising computer-executable instructions that, when executed, direct a processor to perform acts including: receiving a request to perform an operation" is taught in '377 (Col 4 lines 15-30, and lines 45-60, and Col 18 lines 29-45); "checking whether to access a business logic in order to generate a result for the requested operation; obtaining, from the business logic, a set of zero or more additional tests to be performed in order to generate the result; performing each additional test in the set of tests if there is at least one test in the set of tests; checking a set of pluggable rules to determine the result of the requested operation; and returning, as the result, a failure indication if checking the business logic or checking the set of pluggable rules indicates that the result is a failure, otherwise returning, as the result, a success indication" is taught in '377 (Col 18 line 30 to Col 19 line 35).

9. As per claim 9, "One or more computer-readable media as recited in claim 8, wherein the receiving comprises receiving, from the business logic, the request to perform the operation" is taught in '377 (Col 19 lines 25-35).

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10. As per claim 10, "One or more computer-readable media as recited in claim 8, wherein the receiving comprises receiving, as part of the request, an indication of a user, and wherein the checking the set of pluggable rules comprises comparing an object associated with the user to the rules in the set of pluggable rules and determining whether the operation can be performed based at least in part on whether the user is permitted to perform the operation" is taught in '377 (Col 34-55).

11. As per claim 11, "One or more computer-readable media as recited in claim 8, wherein the receiving comprises having one of a plurality of methods invoked" is taught in '377 (Col 6 lines 27-45, and Col 19 lines 4-35).

12. As per claim 12, "One or more computer-readable media as recited in claim 8, wherein the set of pluggable rules is a set of security rules defined using high-level permission concepts" is taught in '377 (Col 6 lines 28-45).

13. As per claims 13, 22, 32, and 37, "One or more computer-readable media as recited in claims 12, 19, 31, and 36, wherein the high-level permission concepts include an operation and a context, wherein the operation allows identification of an operation to be performed and the context allows identification of what the operation is to be performed on" is taught in '377 (Col 6 line 57 to Col 7 line 28).

14. As per claim 14, "One or more computer-readable media as recited in claim 8, wherein the computer-executable instructions are implemented as an object" is taught in '377 (Col 6 lines 25-45).

15. As per claims 16, 28, and 38, "One or more computer-readable media as recited in claims 8, 27, and 35, wherein the set of pluggable rules can be replaced with another set of pluggable rules without altering the business logic" is taught in '377 (Col 2 lines 23-50).

16. As per claim 19, "A method comprising: providing high-level permission concepts for security rules; allowing a set of security rules to be defined using the high-level permission concepts, wherein the set of security rules allows permissions to be assigned to users of an application; and determining, based at least in part on a permission assigned to a user, whether to permit an operation based on a request by the user" is taught in '377 (Col 13 lines 8-55).

17. As per claim 23, A method as recited in claim 19, "wherein the method is implemented in an object having a plurality of interfaces for requesting a determination as to whether to permit a plurality of operations including the operation requested by the user" is taught in '377 (Col 13 lines 8-55).

18. As per claim 26, "A method comprising: receiving a request to perform an operation; accessing a set of low-level rules, wherein the low-level rules are defined in terms of high-level concepts; checking whether a user requesting to perform the operation is entitled to perform the operation based at least in part on the set of low-level rules; and returning an indication of whether the operation is allowed or not allowed" is taught in '377 (Col 6 line 56 to Col 7 line 27).

19. As per claim 31, "A method comprising: assigning high level security concepts to an application domain; and allowing a set of pluggable rules to define low-level rules, in terms of the high level security concepts, for different business logic in the application domain" is taught in '377 (Col 6 lines 20-45, and Col 20 lines 4-58).

20. As per claim 35, "An architecture comprising: a plurality of resources; a business logic layer to process, based at least in part on the plurality of resources, requests received from a client; and a pluggable security policy enforcement module to enforce security restrictions on accessing information stored at the plurality of resources" is taught in '377 (Col 6 line 57 to Col 7 line 28, and Col 20 lines 10-58).

21. As per claim 36, "An architecture as recited in claim 35, wherein the pluggable security policy enforcement module defines high-level permission concepts for security rules and further defines a set of security rules using the high-level permission concepts" is taught in '377 (Col 6 line 57 to Col 7 line 28).



22. As per claim 39, "An architecture as recited in claim 35, wherein the pluggable security policy enforcement module is configured to determine, based at least in part on a permission assigned to a user and on one or more additional tests identified by accessing the business logic layer, whether to permit an operation to access information at the plurality of resources" is taught in '377 (Col 13 lines 7-56).

***Claim Rejections - 35 USC § 103***

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claims 6-7, 15, 17-18, 24-25, 30, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over '377 in view of Miller, US Patent No. 5265221, hereinafter '221.

25. As per claims 6, 17, 24, and 30, "A system as recited in claims 1, 8, 19, and 26, wherein the different granularities of control comprise a plurality of sets of rules, and wherein each set of rules includes a plurality of permission assignment objects" is taught in '377 (Col 18 line 30 to Col 19 line 35). However, each of the permission assignment objects associates a user with a particular role, wherein each particular role is associated with one or more permissions, and wherein each of the one or more

permissions identifies a particular operation and context on which the operation is to be performed" is not taught clearly in '377. In '377, the invention only discloses a security system implemented in an environment with multiple domain of operation to execute business logic operation regardless of the source of the request. Nevertheless, "the permission assignment objects associates to a user with a particular role, wherein each particular role is associated with one or more permissions, and wherein each of the one or more permissions identifies a particular operation and context on which the operation is to be performed" is taught clearly in '221 (Col 4 line 57 to Col 5 line 62). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate the user's permission with a particular operation and context before the security objects are implemented to authorize and permit the business logic operation. The incorporation will add an additional layer of security to the business logic operation domain.

26. As per claims 7, 18, and 25, "A system as recited in claims 6, 17 and 24, wherein each of the permission assignment objects further identifies whether the one or more permissions in the particular role are granted to the user or denied to the user" is taught in '221 (Col 5 line 65 to Col 6 line 27).

27. As per claims 15 and 33, "One or more computer-readable media as recited in claims 8 and 31" is taught in '377. However, "the computer-executable instructions further direct the processor to perform acts including: determining if at least one of the

tests in the set of zero or more additional tests would indicate a result of failure; and returning, as the result, the failure indication without checking the set of pluggable rules” is not taught in ‘377. The invention in ‘377 only discloses the method of utilizing the pluggable rules (Col 20 lines 4-58). Nevertheless, the invention in ‘221 discloses another layer of security rules before the pluggable rules layer, which is the user authentication (Col 4 line 57 to Col 5 line 62). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate the user authentication mechanism in ‘221 with the pluggable rules to authorize the execution of the business logic request. The additional layer provides another layer of security, which will strengthen the system.

### **Conclusion**


1. Any inquiry concerning this communication from the examiner should be directed to Linh Son whose telephone number is (571)-271-3856.
2. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Kim Y. Vu can be reached at (571)-272-3859. The fax numbers for this group are (703)-872-9306 (official fax). Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2100.

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3. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PMR only. For more information about the PAIR system, see <http://pzr-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Linh LD Son**

**Patent Examiner**

  
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